Issuance Date: January 1, 2000
Effective Date: February 1, 2000
Expiration Date: January 1, 2005

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-000087-6

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Kaiser Aluminum & Chemical Corporation
Mead Work
Mead, Washington 99021

Facility Location:

East 2111 Hawthorne Road
Mead, Washington

Receiving Water:

Deadman Creek

Water Body I.D. No.:

24-55-02 Class A

Discharge Locations: Outfall 001

Latitude: 47 46' 48" N
Longitude: 117 20' 06" W

Industry Type:

Primary Aluminum Smelter & Coke Calciner

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is authorized to discharge in accordance with
the special and general conditions which follow.

Carol Kraege, P.E.
Industrial Section Manager
Washington State Department of Ecology

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SUMMARY OF SCHEDULED PERMIT REPORT SUBMITTALS

Permit Section	Submittal	Frequency	First Submittal Date
S1.D	Priority Pollutant Scan	Annually	
S2.	Acute Toxicity Testing	Once per two months	April 15, 2000
S3.	Chronic Toxicity Testing	Once per four months	April 15, 2000
S4.	Discharge Monitoring Report	Monthly	
S4.J.3	Notice of Change in Authorization	As Necessary	
S6	Treatment System Operation Plan	As Necessary	
S8.B.1.	Stormwater Pollution Prevention Plan	Within 1 year	February 1, 2001
S9.A	Sediment Sampling and Analysis Plan	Within 1 year	February 1, 2001
S9.B	Sediment Data Report	Once per permit cycle	Within 1 year of approval of S9.A
S10.	Turf Farm Management plan	Within 6 month	July 1, 2000
S11.	Temperature Study plan	One year	February 1, 2001
G17.	Application for permit renewal	Once per permit cycle	180 days before permit expiration

Note: Refer to the Special and General Conditions of this permit for additional submittal requirements.

SPECIAL CONDITIONS

S1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Process Wastewater Limitations - Outfall # 001

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge process and domestic wastewater at the permitted location subject to meeting the following limitations:

Parameter	Units	Effluent Limitations: Outfall # 001		Monitoring Frequency	Sample Type
		Average Monthly [a]	Daily Maximum [b]		
Total Suspended Solids	lbs/day	120	681	Daily [f]	24 hr comp [g]
Fluoride	lbs/day	106 [h]	765	Daily [f]	24 hr comp [g]
Aluminum	lbs/day	21	122	Daily [f]	24 hr comp [g]
Chlorine [j]	mg/l	0.007	0.018	Continuous [i]	Continuous [i]
Free Cyanide [c]	mg/l	0.003	0.008	3 days/week	24 hr comp [g]
Benzo(a)Pyrene [d]	mg/l	--	--	Weekly	24 hr comp [g]
Oil and Grease	mg/l	--	10	5 days/week	Grab
pH [e]		Daily Minimum 6.5	Daily Maximum 8.5	Continuous [i]	Meter
Temperature	°F	--	--	Continuous [i]	Continuous [i]
Flow	MGD	--	--	Continuous [i]	Continuous [i]
Production	tons/day	--	--	Daily Average	

[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

[b] The maximum daily effluent limitation is defined as the highest allowable daily discharge.

[c] The method for free cyanide analysis shall be Weak Acid Dissociable Cyanide, Method 4500-CN I., Standard Methods for the Examination of Water and Wastewater, 19th Edition.

[d] During benzo(a)pyrene composite collection, priority pollutant cleaned sampling per 40 CFR Part 136, App. A, Method 625, shall be used. The composite sample shall be refrigerated in the dark during collection.

[e] Indicates the range of permitted values. The instantaneous maximum and minimum pH shall be reported monthly. pH shall be within the range of 6.5 to 8.5 with a human-caused variation within a range of less than 0.5 units.

[f] Daily is defined as monitoring seven days per week.

[g] A 24 hr comp sample is defined as a 24 hour flow proportional composite sample.

[h] Compliance with this limit is determined by calculating a consecutive 120-day rolling average for each day of the current month.

i Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment malfunctions. Sampling shall be taken (at least three times per day) when continuous monitoring is not possible.

[j] The Permittee will be required to monitor for chlorine only if chlorine is used at other than the sanitary treatment plant. If chlorine is not used the Permittee is required to certify this fact on the monthly Discharge Monitoring Report. The permittee shall notify the Department twenty – four hours prior to chlorine usage.

B. Sanitary Treatment Plant Discharge Limitations

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge domestic wastewater at the permitted location subject to meeting the following limitations:

Parameter	Units	Effluent Limitations: Sanitary Plant Discharge		Monitoring Frequency	Sample Type
		30-Day Average [a]	7-Day Average [b]		
Biochemical Oxygen [c] Demand (5 day BOD)	mg/l lbs/day	25.0 40.0	45.0 70.0	Weekly [f]	24 hr comp [d]
Total Suspended Solids (TSS)	mg/l lbs/day	30.0 50.0	45.0 70.0	Weekly [f]	24 hr comp [d]
Fecal Coliform [e]	# /100 mls	200	400	Weekly [f]	Grab
Flow	MGD	--	--	Continuous	Continuous
		AND			
		Minimum	**Maximum**		

Chlorine	ppm	0.1	2.0	7-day average	Grab
pH [h]		6.0	9.0	Daily [g]	Grab

[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

[b] The 7-Day Average effluent limitation is defined as the highest allowable discharge rate for 7 consecutive days, calculated as the average of all samples taken during the seven day interval.

[c] In addition, the 30-day average percent removal for 5 day BOD shall not be less than 65 percent.

[d] A 24 hr comp sample is defined as a 24 hour flow proportional composite sample.

[e] Any exceedance of the Fecal Coliform 7-Day Average limit will require daily sampling until the values have been below the 7-Day Average limit for three consecutive days.

[f] Weekly is defined as once per week.

[g] Daily is defined as monitoring seven days per week.

[h] Indicates the range of permitted values at all times.

C. Whole Effluent Toxicity (WET) Testing

WET testing was required during the previous permit cycle and indicated that a reasonable potential exists at outfall 001 to cause receiving water toxicity. Therefore the Permittee shall perform WET monitoring and tests from outfall 001. The specific WET testing is found Sections S2 and S3.

The testing shall meet the quality assurance criteria in the most recent versions of the EPA manual and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria.*

D. Priority Pollutant Testing

The Permittee shall perform an annual priority pollutant scan for their wastewater effluent at outfall 001. The test method and detection levels shall be in accordance with the latest version of the Department of Ecology's Permit Writer's Manual. Testing shall be performed during normal operations and flow regime.

E. Mixing Zone Descriptions

The Department of Ecology does not authorize the Permittee a mixing zone because the receiving water is too small according to the requirements of WAC 173-201A-100.

S2. ACUTE TOXICITY

A. Effluent Limit for Acute Toxicity at Outfall 001

The effluent limit for acute toxicity is no acute toxicity detected in a 100% effluent concentration.

In the event of failure to pass the test described in subsection B. of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection C. are being met to the satisfaction of the Department.

B. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

The Permittee shall conduct monitoring to determine compliance with the effluent limit for acute toxicity. The acute toxicity tests shall be performed using at a minimum 100% effluent and a control. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after the sample date. The percent survival in 100% effluent shall be reported along with all compliance monitoring results.

Compliance monitoring shall be conducted every other month using each of the species and protocols listed below on a rotating basis:

1) Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F)

2) Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hours static test, method: EPA/600/4-90/027F).

In any acute toxicity test, if a statistically significant difference in survival is determined between the control and the 100% effluent concentration using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/6004-89/001), the effluent has failed the test for compliance with the whole effluent toxicity limit. If the Permittee undertakes the additional compliance monitoring required in subsection C, the Permittee will be considered to be in compliance with this subsection. If the difference in survival between the control and the

100% effluent concentration is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

C. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If a toxicity test conducted for compliance monitoring under subsection B. determines a statistically significant difference in response between the 100% effluent concentration and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall be conducted using a 100% effluent concentration and a control. The 100% effluent concentration shall be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for acute toxicity as described in subsection B. The discharger shall return to the original monitoring frequency in subsection B. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department-within 60 days after the final sample date. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

D. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S3. CHRONIC TOXICITY

A. Effluent Limit for Chronic Toxicity

The effluent limit for chronic toxicity is no toxicity detected in a 100% effluent concentration.

In the event of failure to pass the test described in subsection B. of this section for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection C. are being met to the satisfaction of the Department.

B. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

The Permittee shall conduct monitoring to determine compliance with the effluent limit for chronic toxicity. The chronic toxicity tests shall be performed using at a 100% effluent concentration and a control. Chronic toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after the sample date. This written report shall contain the results of hypothesis testing conducted as described in this subsection using both the 100% effluent concentration versus the control.

Monitoring to determine compliance with the effluent limit shall be conducted quarterly using the following species and the most recent version of the following protocols on a rotating basis:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	*Pimephales promelas*	EPA/600/4-91/002
Water flea	*Ceriodaphnia dubia*	EPA/600/4-91/002

Alga	*Selenastrum capricornutum*	EPA/600/4-91/002

In any chromic toxicity test, a statistically significant difference in survival is determined between the control and the 100% effluent concentration using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001), the effluent has failed the test for compliance with the whole effluent toxicity limit. If the Permittee undertakes the additional compliance monitoring required in subsection C. the Permittee will be considered to be in compliance with this subsection. If the difference in response between the control and the 100% effluent concentration is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the 100% effluent concentration and the control.

C. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection B. determines a statistically significant difference in response between the 100% effluent concentration and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a 100% effluent concentration and a control. The 100% effluent concentration shall be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection B. The discharger shall return to the original monitoring frequency in subsection B. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the

additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department-within 60 days after the final sample date. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

D. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole*

   Effluent Toxicity Test Review Criteria in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S4. MONITORING AND REPORTING

The Permittee shall monitor and report in accordance with the following conditions.

A. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department.

In addition, a summary sheet, listing daily results for the parameters listed in section S1., MDLs, and QLs (when applicable), shall be submitted to the Department. The report and summary sheet shall be sent to the Department of Ecology, Industrial Section, P. O. Box 47706, Olympia, Washington 98504-7706. Monitoring shall be started on the effective date of the permit and the first report is due on the 15th day of the following month. Monitoring results obtained during the month shall be summarized on the Discharge Monitoring Report (DMR) Form (EPA 3320-1) and submitted no later than the 15th day of the following month, unless otherwise specified in this permit.

Monitoring results of the sanitary treatment system, specified in Section S1., shall be reported on Form ECY 040-2-33 or EPA form 3320-1. This report shall accompany the summary report above.

B. Records Retention

The Permittee shall retain records of all monitoring information for a period of at least three (3) years. These records including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Representative Sampling

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

After a portion of the composite sample is removed for the Permittee's analysis, the remainder, a 4-8 liter (minimum), shall be retained until noon. This sample shall be kept refrigerated at 4^{o} centigrade in the dark.

E. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by the Department.

F. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the

measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

G. Laboratory Accreditation

All monitoring data, except for flow, temperature, settleable solids, conductivity, pH, and internal process control parameters, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by the Department.

H. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit (S1.) using test procedures specified by this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

I. Sanitary Plant Operator Certification

All operators responsible for facilities that treat sanitary waste, or a combination of sanitary, commercial, or industrial waste shall be certified in accordance with the provisions of Chapter 70.95B RCW and Chapter 173-230 WAC within 180 days of the issuance date of this permit.

J. Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified in accordance with the provisions of 40 CFR Part 122.22.

1. All permit applications shall be signed by either a responsible corporate official, a general partner of a partnership, or the proprietor of a sole proprietorship.

2. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described above and submitted to the Department, and

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph J.2.b is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of J.2.b must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:
"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted.

Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

S5. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment. The Permittee nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee shall update the solid waste control plan within 18 months of the issuance of this Permit. The Permittee shall have the updated plan available for review on site at all times. This plan shall include all solid wastes with the exception of those solid wastes regulated by Chapter 173-303 WAC (Dangerous Waste Regulations). The plan shall include at a minimum a description, source, generation rate, and disposal methods of these solid wastes.
This plan shall not be at variance with any approved local solid waste management plan. The Permittee shall comply with the plan and any modifications thereof.

S6. TREATMENT SYSTEM OPERATING PLAN

The wastewater treatment systems shall be operated according to procedures and criteria described in an operating plan. This plan shall be updated and maintained on site within 180 days of the date of the issuance date of this permit. The plan shall include, but is not limited to, the following:

A baseline operating condition that describes the operating parameters and procedures used to meet the effluent limitations of S1. at the production levels used in developing these limitations.

In the event of production levels that are below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.

A description of any regularly scheduled maintenance or repair activities at the permitted facility that would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

This plan shall be updated to include requirements for any major modifications of the treatment system.

S7. SPILL PLAN

The Permittee shall update the existing Spill Control Plan no later than 18 months after Permit issuance and keep it on site. It must include site spill control plans for the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, when spilled or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by

the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching state's waters.

The Permittee shall review and update the Spill Plan, as needed, at least annually. The plan and any supplements shall be followed throughout the term of the permit. The updated spill control plan shall include the following:

A description of the reporting system will be used to alert responsible managers and legal authorities in the event of a spill.

A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

A list of all oil and chemicals used, processed, or stored at the facility that may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals required by 40 CFR Part 112, and contingency plans required by Chapter 173-303 WAC may be used.

S8. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The definitions of terms used in this section are provided in the guidance document entitled *Stormwater Pollution Prevention Planning for Industrial Facilities*, which is published by the Department of Ecology.

A. Plan Development Deadlines

The Permittee shall develop, implement, and comply with a SWPPP in accordance with the following schedule:

1. Within one year of permit issuance, develop a SWPPP and retain it on-site.

2. Within two years of permit issuance, complete the implementation of *operational BMPs* and applicable *source control BMPs*, as required under this Special Condition, which do not require *capital improvements*.

3. Within three years of permit issuance, complete the implementation of BMPs.

The guidance for development of a SWPPP is available from the Permit Coordinator, Industrial Section, Headquarters Office, Olympia, Washington 98504.

B. General Requirements

1. Submission, Retention and Availability:

   The Permittee shall submit a copy of the SWPPP to the Department within one year of permit issuance, for review and comment. The SWPPP and all of its modifications shall be signed in accordance with Special Condition S4.J. Retain the SWPPP on-site or within reasonable access to the site.

2. Modifications:

   The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation or maintenance that causes the SWPPP to be less effective in controlling the pollutants.

   Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP shall be modified, as appropriate, within two (2) weeks of such determination.

   The proposed modifications to the SWPPP shall be submitted to the Department at least 30 days in advance of implementing the proposed changes in the plan, unless Ecology approves immediate implementation. The Permittee shall provide for implementation of any modifications to the SWPPP in a timely manner.

3. The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into a SWPPP become enforceable requirements of this permit.

4. The Permittee shall prepare and maintain the SWPPP in accordance with the guidance provided in the *Stormwater Pollution Prevention Planning for Industrial Facilities*. The plan shall contain the following elements:

   a. Assessment and description of existing and potential pollutant sources,

   b. A description of the operational BMPs,

   c. A description of selected source-control BMPs,

   d. When necessary, a description of the erosion and sediment control BMPs,

   e. When necessary, a description of the treatment BMPs, and

   f. An implementation schedule.

C. <u>Implementation</u>

The Permittee shall conduct two inspections per year; one during the wet season (October 1-April 30) and the other during the dry season (May 1-September 30).

1. The wet season inspection shall be conducted during a rainfall event by personnel named in the Stormwater Pollution Prevention Plan (SWPPP) to verify that the description of potential pollutant sources required under this permit is accurate; the site map as required in the SWPPP has been updated or otherwise modified to reflect current conditions; and the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate.

   The wet-weather inspection shall include observations of the presence of floating materials, suspended solids, oil and grease, discolorations, turbidity, odor, etc. in the stormwater discharge(s).

2. The dry season inspection shall be conducted by personnel named in the SWPPP. The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including *leachate*) to the *stormwater drainage system*. If an unpermitted, non-stormwater discharge is discovered, the Permittee shall immediately notify the Department.

D. Plan Evaluation

The Permittee shall evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit or whether additional controls are needed.
A record shall be maintained summarizing the results of inspections and a certification, in accordance with Condition S4.J., that the facility is in compliance with the plan and this permit and identifying any incidents of noncompliance.

S9. SEDIMENT MONITORING

The permittee shall submit to the Department for review and approval a Sediment Sampling and Analysis Plan for baseline sediment no later than one year after permit issuance. The purpose of the plan is characterize sediment quality in the vicinity of the Permittee's discharge locations.

Following the Department approval of the Sediment Sampling and Analysis Plan, sediments will be collected and analyzed. The permittee will submit to the Department a

Sediment Data Report containing the results of the sediment sampling and analysis no later than12 months after Department approval of sediment sampling and analysis plan.

A. Sediment Sampling and Analysis Plan

1. The permittee shall prepare a Sediment Sampling and Analysis Plan from the following guidance:

   Sediment Source Control Standards Users Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology, 1995).

2. The Sediment Sampling and Analysis Plan shall include 3 - 4 discrete sampling stations in the vicinity of the outfall. These sampling stations shall not include the required reference and ambient stations.

B. Sediment Data Report

1. The permittee shall submit a Sediment Data Report conforming with the approved Sampling and Analysis Plan and the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan Appendix (Ecology 1995).

S10. TURF FARM MONITORING

There is a new turf farm next to the settling basin, the farm uses the basin water for irrigation. For the ground water protection, The permittee shall submit the Department the following:

A. Crop Management Plan

The crop management plan shall be submitted to the Department within 6 months after this permit is issued. The crop management plan shall follow the requirements contained in Ecology's Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems, 1993. In the plan the Permittee should address hydraulic and pollutants loading in detail. The Permittee shall also address reasons why the groundwater will not be contaminated.

B. Design Criteria for Public Health Protection

For public health protection, the Permittee shall also use the Washington State Department of Health's Design Criteria for Municipal Wastewater Land

Treatment Systems for Public Health Protection (February 1994) to prepare the engineering reports addressed in S10.A.

C. Monitoring Parameters

During the crop season, total dissolved solids (TDS) and nitrate nitrogen shall be monitored twice a month by grab sampling. Conductivity should be monitored with TDS, if the Permittee wants to use conductivity as surrogate for TDS in the future. The Department will review a reasonable data set of the analysis results of TDS and conductivity and determine whether conductivity can be used as surrogate.

S11. TEMPERAURE STUDY PLAN

The Permitee shall study the temperature at the Deadman Creek near the Outfall 001 for one year. This study shall include data for daily upstream stream temperature(s), downstream temperature(s), outfall 001 temperature, and outfall flow rate at the time these temperatures will be measured.

During this study, the Permittee also required to conduct weekly dissolved oxygen test from the settling basin outfall for a year.

The result of the study plan will be used by the Permittee to design and construct a wastewater treatment system to meet both AKART and water quality regulations.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control.

G3. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G4. NONCOMPLIANCE NOTIFICATION

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department with the following information:

A. A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized waste discharges;

B. The period of noncompliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and

C. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.

In addition, the Permittee shall take immediate action to stop, contain, and clean up any unauthorized discharges and take all reasonable steps to minimize any adverse impacts to waters of the state and correct the problem. The Permittee shall notify the Department by telephone so that an investigation can be made to evaluate any resulting impacts and the corrective actions taken to determine if additional action should be taken.

In the case of any discharge subject to any applicable toxic pollutant effluent standard under Section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or the environment, 40 CFR Part 122 requires that the information specified in Sections G4.A., G4.B., and G4.C., above, shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If this information is provided orally, a written submission covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances, unless the Department waives or extends this requirement on a case-by-case basis.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

G5. BYPASS PROHIBITED

The intentional bypass of wastes from all or any portion of a treatment works is prohibited unless the following four conditions are met:

A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

C. The Permittee submits notice of an unanticipated bypass to the Department in accordance with Condition G4. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the Department, if possible, at least 30 days before the date of bypass (or longer if specified in the special conditions);

D. The bypass is allowed under conditions determined to be necessary by the Department to minimize any adverse effects. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the Department will approve or deny the request. Approval of a request to bypass will be by administrative order under RCW 90.48.120.

G6. RIGHT OF ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;

B. To have access to and copy at reasonable times any records that must be kept under the terms of the permit;

C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;

D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and

E. To sample at reasonable times any discharge of pollutants.

G7. PERMIT MODIFICATIONS

The Permittee shall submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will (1) result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or (2) violate the terms and conditions of this permit.

G8. PERMIT MODIFIED OR REVOKED

After notice and opportunity for public hearing, this permit may be modified, terminated, or revoked during its term for cause including, but not limited to, the following:

A. Violation of any terms or conditions of the permit;

B. Failure of the Permittee to disclose fully all relevant facts or misrepresentations of any relevant facts by the Permittee during the permit issuance process;

C. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;

D. Information indicating that the permitted discharge poses a threat to human health or welfare;

E. A change in ownership or control of the source; or

F. Other causes listed in 40 CFR 122.62 and 122.64.

Permit modification, revocation and reissuance, or termination may be initiated by the Department or requested by any interested person.

G9. REPORTING A CAUSE FOR MODIFICATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G8. or 40 CFR 122.62 must report such plans, or such information, to the Department so that a decision can be made on whether action to modify or revoke and reissue a permit will be required. The Department may then require submission of a new application. Submission of such application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G10. TOXIC POLLUTANTS

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the Department shall institute proceedings to modify or revoke and reissue the permit to conform to the new toxic effluent standard or prohibition.

G11. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Facilities shall be constructed and operated in accordance with the approved plan.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G14. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G15. REVOCATION FOR NONPAYMENT OF FEES

The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G16. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G17. DUTY TO REAPPLY

The Permittee must reapply, for permit renewal, at least 180 days prior to the specified expiration date of this permit.